This listing of claims will replace all prior versions, and listings, of claims in the application:

<u>Listing of claims:</u>

1. (currently amended) A computer-implemented method ~~of financial instrument trading~~ <u>for generating hedging orders</u>, the method comprising:

   calculating a ~~financial risk~~ <u>volatility factor</u> associated with a first financial instrument ~~based on a pricing volatility mode~~;

   generating <u>a first stage of a multiple stage hedge sequence, wherein said first stage in the hedge sequence comprises:</u>

   ~~an~~ <u>a first</u> order to hedge the first financial instrument by acquiring <u>a first position in</u> a second financial instrument at a <u>first</u> target price that is determined based on the ~~pricing~~ volatility ~~model~~ <u>factor and a reference price; and</u>

   <u>a second order to hedge the first financial instrument by acquiring an opposite position to said first position in the second financial instrument at a second target price that is determined based on said volatility factor and said reference price</u>; and

   transmitting the <u>first and second orders</u> ~~order~~ to an exchange<u>, such that both the first and the second orders are simultaneously pending and execution of the first or second orders is determined based on price movement of the second financial instrument</u>.

2. (currently amended) The method of claim 1 wherein acquiring <u>a position in</u> the second financial instrument comprises acquiring a position selected from the group consisting of a short position and a long position in the second financial instrument.

3. (canceled)

4. (currently amended) The method of claim 1 wherein:

   the <u>first</u> order comprises a buy order at a target price less than the current asking price~~;~~

2.

~~the method further comprises generating a second order to hedge comprising a sell order to~~

    ~~sell the second financial instrument at a target price greater than the current bid price for~~

    ~~the second financial instrument, and~~

~~transmitting the order further comprises transmitting the buy and the sell order to the~~

    ~~exchange such that both the buy and the sell order are simultaneously pending and~~

    ~~execution of the buy or sell order is determined based on price movement of the second~~

    ~~financial instrument.~~

5. (currently amended) The method of claim ~~1~~ <u>4</u> ~~further comprising automatically generating a~~

    ~~subsequent~~ <u>wherein said second</u> order to ~~acquire the second financial instrument in response~~

    ~~to a change in the pricing volatility model~~ <u>hedge comprises a sell order to sell the second</u>

    <u>financial instrument at a target price greater than the current bid price for the second financial</u>

    <u>instrument</u>.

6. (currently amended) The method of claim ~~5~~ <u>1</u> wherein the first financial instrument

    comprises an option on an underlying stock and the second financial instrument comprises

    the underlying stock of the first financial instrument.

7. (canceled)

8. (currently amended) The method of claim 1 wherein ~~the financial risk comprises a risk~~

    ~~associated with pricing volatility of the first financial instrument~~ <u>the volatility factor is</u>

    <u>selected from the group consisting of:</u>

        <u>a *percMove*(σ) factor, wherein said *percMove*(σ) factor represents the daily volatility of</u>

<u>the second financial instrument; and</u>

        <u>a *percMove* factor, wherein said *percMove* factor represents a trader specified value.</u>

9. (withdrawn) A financial instrument trading system comprising:

a terminal interface coupling the system to a plurality of trading terminals;

a trading network interface coupling the system to a financial instrument trading exchange;

a hedging engine operatively coupled to the terminal interface and to the trading network interface and configured to receive hedging data from ones of the trading terminals and to transmit buy and sell hedging orders to the financial instrument trading exchange, the hedging engine comprising stored instructions to configure generation of successive stages of buy and sell hedging orders, each of the buy and sell orders comprising a price determined based on a volatility model associated with a financial instrument and a reference price for the financial instrument, the reference price being adjustable for each of the successive stages.

10. (withdrawn) The system of claim 9 wherein the system further comprises a portfolio management system and the hedging engine further comprises stored instructions to configure the hedging engine to retrieve data identifying each of a plurality of financial instruments held in a first account and to assess risk associated with each of the plurality of financial instruments based on the volatility model.

11. (withdrawn) A computer-implemented method of financial instrument trading, the method comprising:

calculating a financial risk associated with a first financial instrument based on a pricing volatility model;

in a first hedging stage,

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      generating a first buy order and a first sell order each for a second financial instrument

          having a valuation that is correlated with the valuation of the first financial

          instrument, the first buy order comprising a buy target price and a buy quantity and

          the first sell order comprising a sell target price and a sell quantity, the buy and the

          sell target price and the buy and the sell quantity each being automatically determined

          based on an initial volatility value determined from the pricing volatility model so as

          to enable hedging of the financial risk;

      transmitting the first buy and the first sell order to an exchange;

      receiving a notification from the exchange that one of the first buy order or the first sell

          order has been filled by the exchange and then canceling the unfilled one of the first

          buy order or first sell order; and

   in each of a plurality of subsequent hedging stages,

      generating another buy and another sell order each for the second financial instrument

          based on a volatility value received from a trader and on a reference price at which a

          previous buy or previous sell order was filled by the exchange during a previous

          hedging stage and on a model adjusting the buy or sell order based on trending of the

          market with respect to the second financial instrument;

      transmitting said buy and said sell order to the exchange;

      receiving a notification from the exchange that one of said buy or sell orders has been

          filled by the exchange and then canceling the unfilled one of the buy order or sell

          orders.

12. (withdrawn) The method of claim 11 wherein the first instrument comprises an option on an

    underlying stock and the second instrument comprises the underlying stock.

13. (new) The method of claim 8, wherein the first order to hedge the first financial instrument by acquiring a first position in a second financial instrument comprises a buy order with a target price, and wherein the target price of said buy order is calculated according to the following formula:

Buy Price = Reference Price * (100 - *percMove*(σ)) / 100.

14. (new) The method of claim 8, wherein the first order to hedge the first financial instrument by acquiring a first position in a second financial instrument comprises a sell order with a target price, and wherein the target price of said sell order is calculated according to the following formula:

Sell Price = Reference Price * (100 + *percMove*(σ)) / 100.

15. (new) The method of claim 13, further comprising a buy quantity, wherein said buy quantity is calculated according to the following formula:

Buy Qty := (*percMove*(σ) * Γ) / Buy Price,

wherein $\Gamma = \dfrac{\partial \Delta}{\partial S} = \dfrac{\partial C^2}{\partial^2 S}$, wherein C is the first financial instrument price, S is the second financial instrument price and $\Delta = \dfrac{\partial C}{\partial S}$.

16. (new) The method of claim 14, further comprising a sell quantity, wherein said sell quantity is calculated according to the following formula:

Sell Qty := (*percMove*(σ) * Γ) / Sell Price,

wherein $\Gamma = \dfrac{\partial \Delta}{\partial S} = \dfrac{\partial C^2}{\partial^2 S}$, wherein C is the first financial instrument price, S is the second

financial instrument price and $\Delta = \dfrac{\partial C}{\partial S}$.

17. (new) The method of claim 15, wherein said opposite position to said first position in the
second financial instrument comprises a sell order with a target price and a sell quantity,
wherein said target price of said sell order is calculated according to the following formula:

Sell Price = Reference Price * (100 + *percMove*(σ)) / 100;

and wherein said sell order quantity is calculated according the following formula:

Sell Qty := (*percMove*(σ) * Γ) / Sell Price.

18. (new) The method of claim 16, wherein said opposite position to said first position in the
second financial instrument comprises a buy order with a target price and a buy quantity,
wherein said target price of said buy order is calculated according to the following formula:

Buy Price = Reference Price * (100 - *percMove*(σ)) / 100

and wherein said buy order quantity is calculated according the following formula:

Buy Qty := (*percMove*(σ) * Γ) / Buy Price.

19. (new) A computer-implemented method for generating a sequence of hedging orders to
hedge the pricing volatility of a first financial instrument, comprising an option associated
with an underlying second financial instrument, the method comprising:

determining a first buy price, a first buy quantity, a first sell price, and a first sell quantity,
wherein the first buy price and the first sell price are based on an initial reference price and a
volatility factor indicative of the percentage movement in the price of the second financial
instrument at which a trader desires to hedge, and wherein the first buy quantity is based on a
gamma factor, the volatility factor and the buy price; and the first sell quantity is based on the
gamma factor, the volatility factor and the sell price;

generating a first stage of a hedging sequence for hedging the first financial instrument, the first
stage comprising:

a first buy order to purchase the second financial instrument specifying a buy quantity
based on the first buy quantity, and a buy price based on the first buy price; and

a first sell order to sell the second financial instrument specifying a sell quantity based on
the first sell quantity, and a sell price based on the first sell price; and

transmitting the first buy order and the first sell order to the exchange such that execution of the
first buy order or the first sell order is determined based on price movement of the second
financial instrument.

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